

**Proposed 2007 Experience
Rating Plan: Simpler,
More Accurate,
More Robust**

**Retro Advisory Committee: July 11, 2006
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Senior Actuary**

Current Formula is Difficult to Understand

WAC 296-17-855:

Experience Factor

$$= (A_p + W \times A_e + (100\% - W) \times E_e + B) / (E + B)$$

where:

A_p = Actual Primary Loss

A_e = Actual Excess Loss

E = Expected Loss

E_e = Expected Excess Loss

Proposed Formula is Easier to Understand

$$\text{Experience Factor} = \left(\text{Credible Primary Loss} + \text{Credible Excess Loss} \right) / \text{Expected Loss}$$

where:

$$\text{Credible Primary Loss} = \text{Actual Primary Loss} \times \text{Primary Credibility} + \text{Expected Primary Loss} \times (100\% - \text{Primary Credibility})$$

$$\text{Credible Excess Loss} = \text{Actual Excess Loss} \times \text{Excess Credibility} + \text{Expected Excess Loss} \times (100\% - \text{Excess Credibility})$$

Easier to Understand: How much Credibility is given to the Experience

Current Tables: Calculate credibilities using B and W values

Proposed Tables: Read credibilities from the table

WAC 296-17-880		TABLE II.	
		"B" AND "W" VALUES	
Effective January 1, 2006			
Maximum Claim Value =		474,300	
Average Death Value =		208,747	
EXPECTED LOSSES		B	W
10,276	& Under	89,490	0%
10,277	- 20,706	88,595	1%
20,707	- 31,292	87,700	2%
31,293	- 42,038	86,805	3%
42,039	- 52,947	85,910	4%
52,948	- 64,026	85,016	5%
64,027	- 75,277	84,121	6%
75,278	- 86,705	83,226	7%
86,706	- 98,315	82,331	8%
98,316	- 110,111	81,436	9%
110,112	- 122,099	80,541	10%
122,100	- 134,283	79,646	11%
134,284	- 146,668	78,751	12%
146,669	- 159,260	77,856	13%

Expected Loss Range		Primary	Excess
<u>From:</u>	<u>To:</u>	<u>Credibility</u>	<u>Credibility</u>
1	to 90	0.1%	0.0%
91	to 179	0.2%	0.0%
180	to 269	0.3%	0.0%
270	to 360	0.4%	0.0%
361	to 450	0.5%	0.0%
451	to 540	0.6%	0.0%
541	to 631	0.7%	0.0%
632	to 722	0.8%	0.0%
723	to 813	0.9%	0.0%
814	to 950	1.0%	0.0%
951	to 1,133	1.2%	0.0%
1,134	to 1,317	1.4%	0.0%
1,318	to 1,502	1.6%	0.0%
1,503	to 1,687	1.8%	0.0%
1,688	to 1,873	2.0%	0.0%
1,874	to 2,060	2.2%	0.0%
2,061	to 2,248	2.4%	0.0%
2,249	to 2,437	2.6%	0.0%
2,438	to 2,626	2.8%	0.0%
2,627	to 2,816	3.0%	0.0%

Increase Accuracy by Changing the Credibility Weights given to Experience

Increase Credibility for Small Firms

Decrease Credibility for Medium to Large Firms

Changes in credibility made so expected future Loss Ratios are almost Equal for firms regardless of size and past loss experience.

Credibility for small firms will be increased and brought closer to the credibility used for the Disability Claim-Free system.

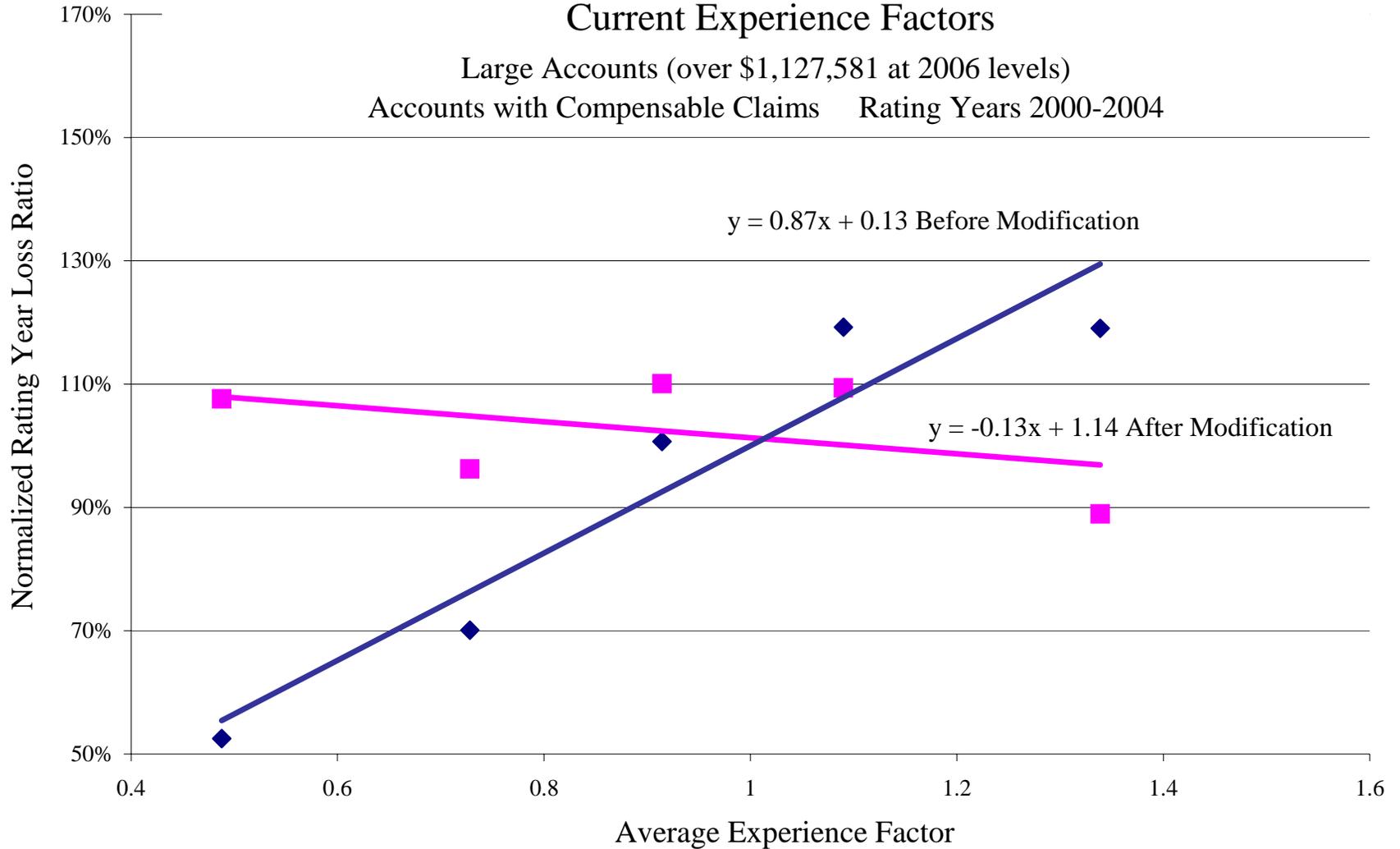
Steps in designing the new Credibilities

- Study Rating Years 2000 to 2004
- What would have worked BEST in the PAST?
- Break out the firm data into different size groupings with similar expected loss sizes (at 2006 levels):
 - Large: \$1,127,581 and over
 - Mid Large: \$ 428,939 - 1,127,580
 - Medium: \$ 211,816 - 428,938
 - Mid Small: \$ 98,316 - 211,815
 - Small: \$ 98,315 and below
- Use accepted actuarial methods

Loss Ratios Before and After Experience Rating

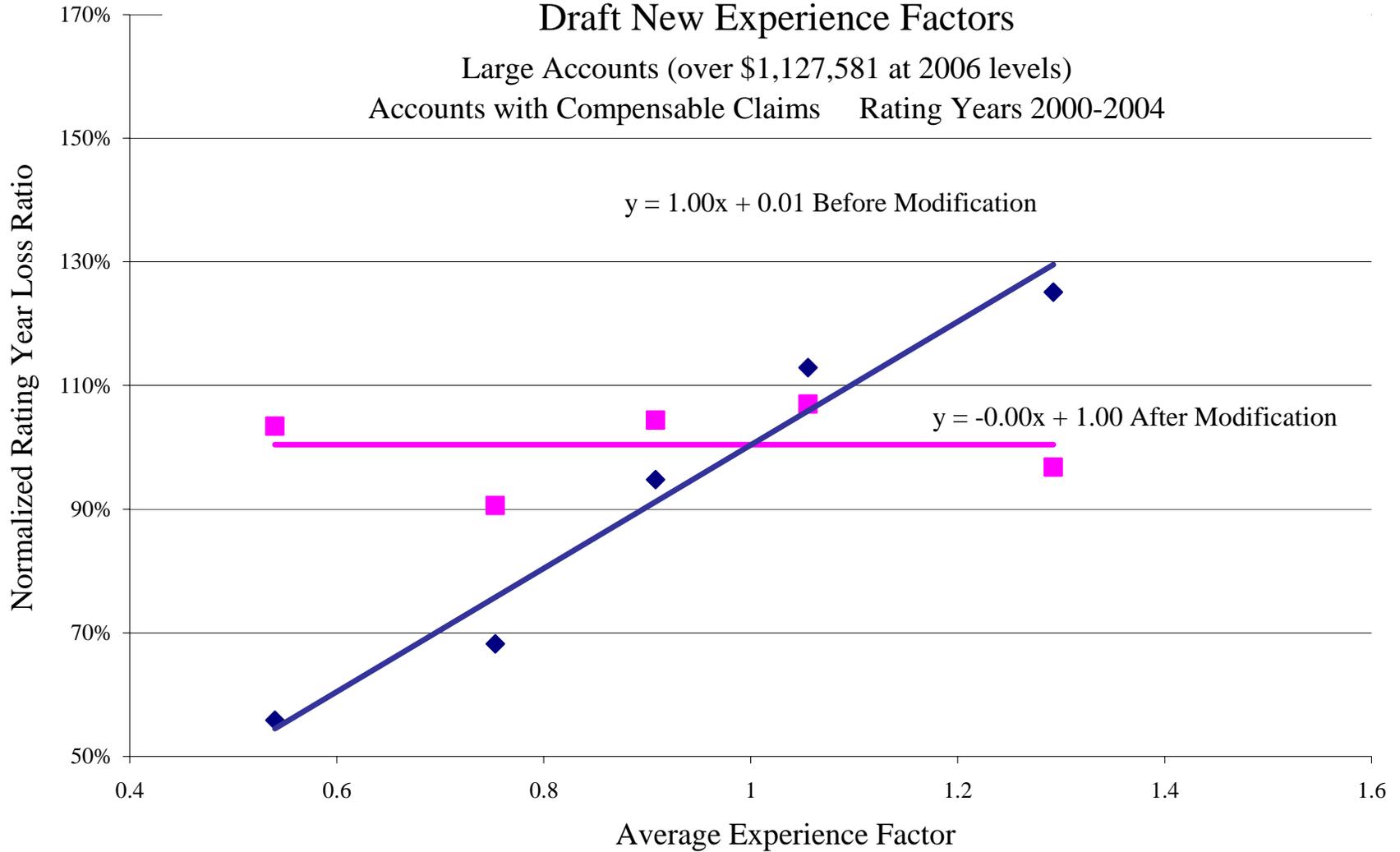
Current Experience Factors

Large Accounts (over \$1,127,581 at 2006 levels)
Accounts with Compensable Claims Rating Years 2000-2004



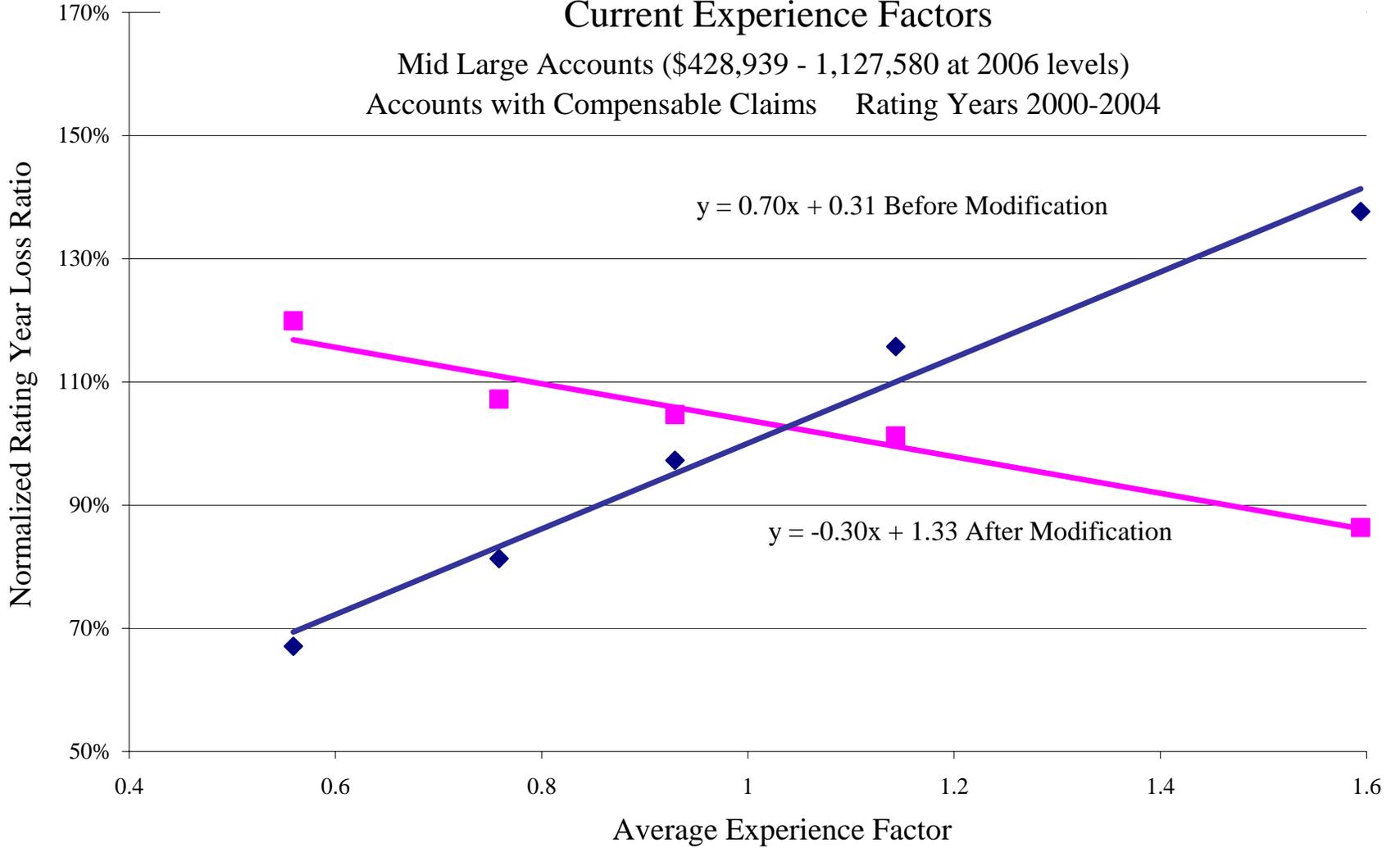
Loss Ratios Before and After Experience Rating Draft New Experience Factors

Large Accounts (over \$1,127,581 at 2006 levels)
Accounts with Compensable Claims Rating Years 2000-2004



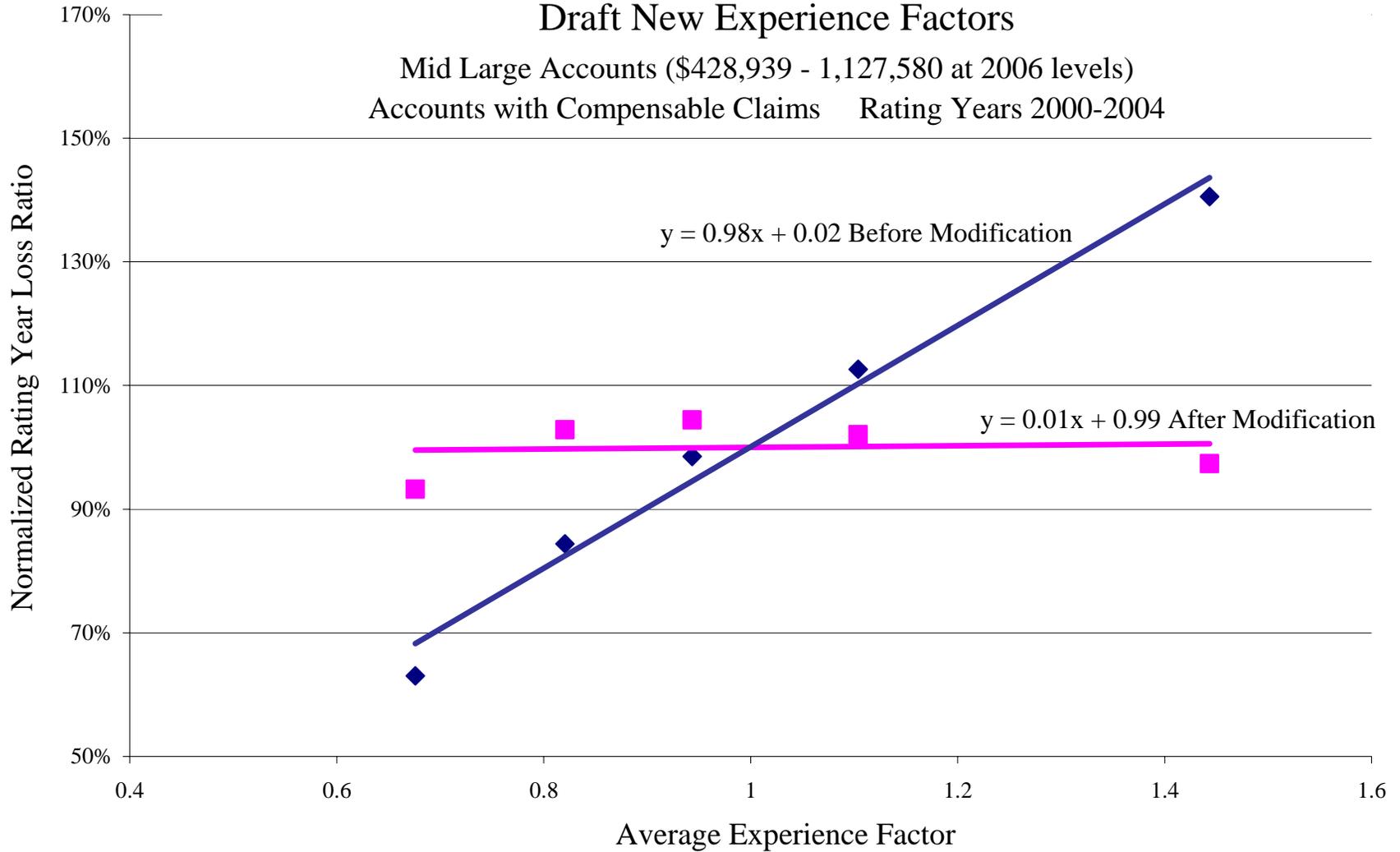
Loss Ratios Before and After Experience Rating Current Experience Factors

Mid Large Accounts (\$428,939 - 1,127,580 at 2006 levels)
Accounts with Compensable Claims Rating Years 2000-2004



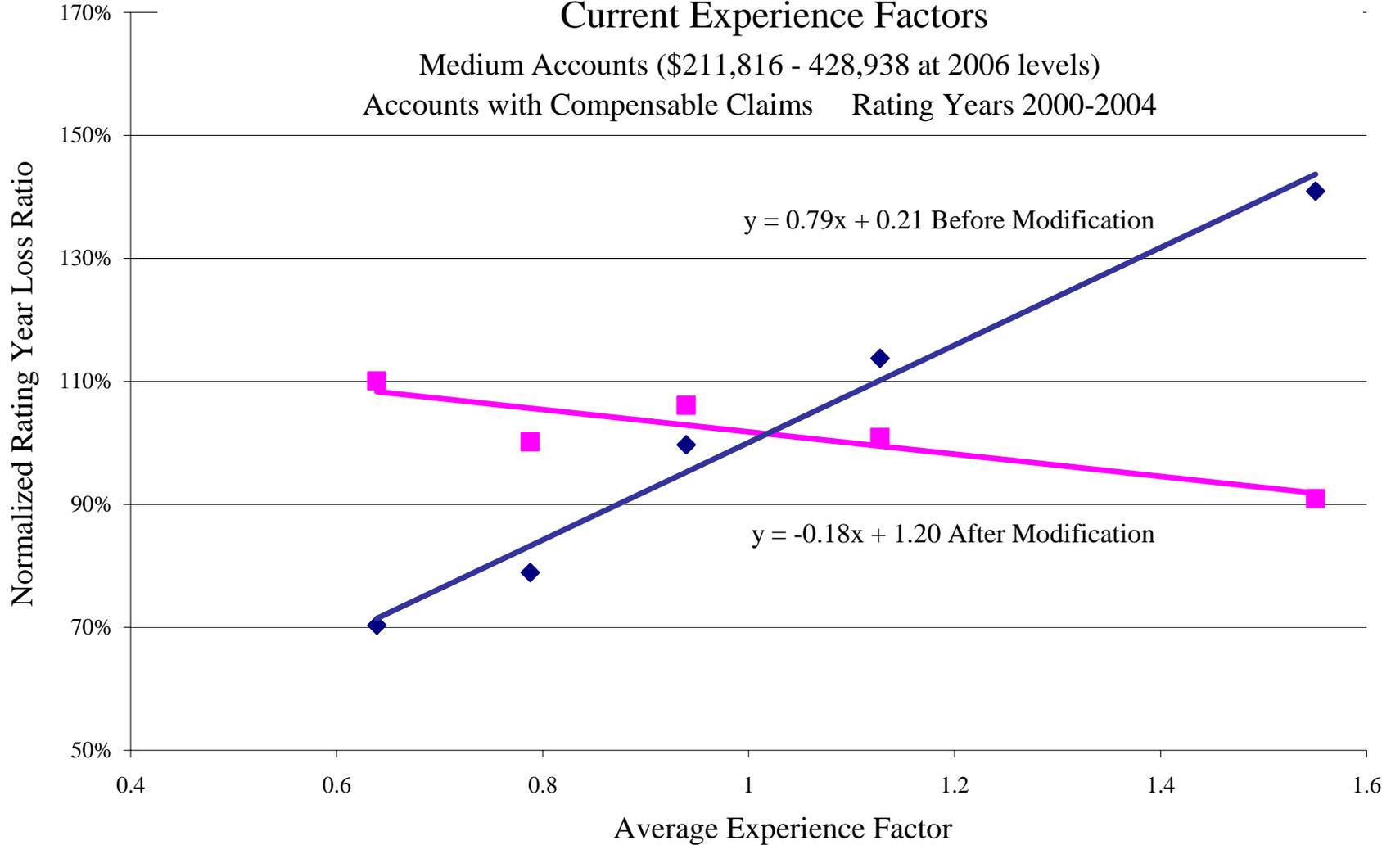
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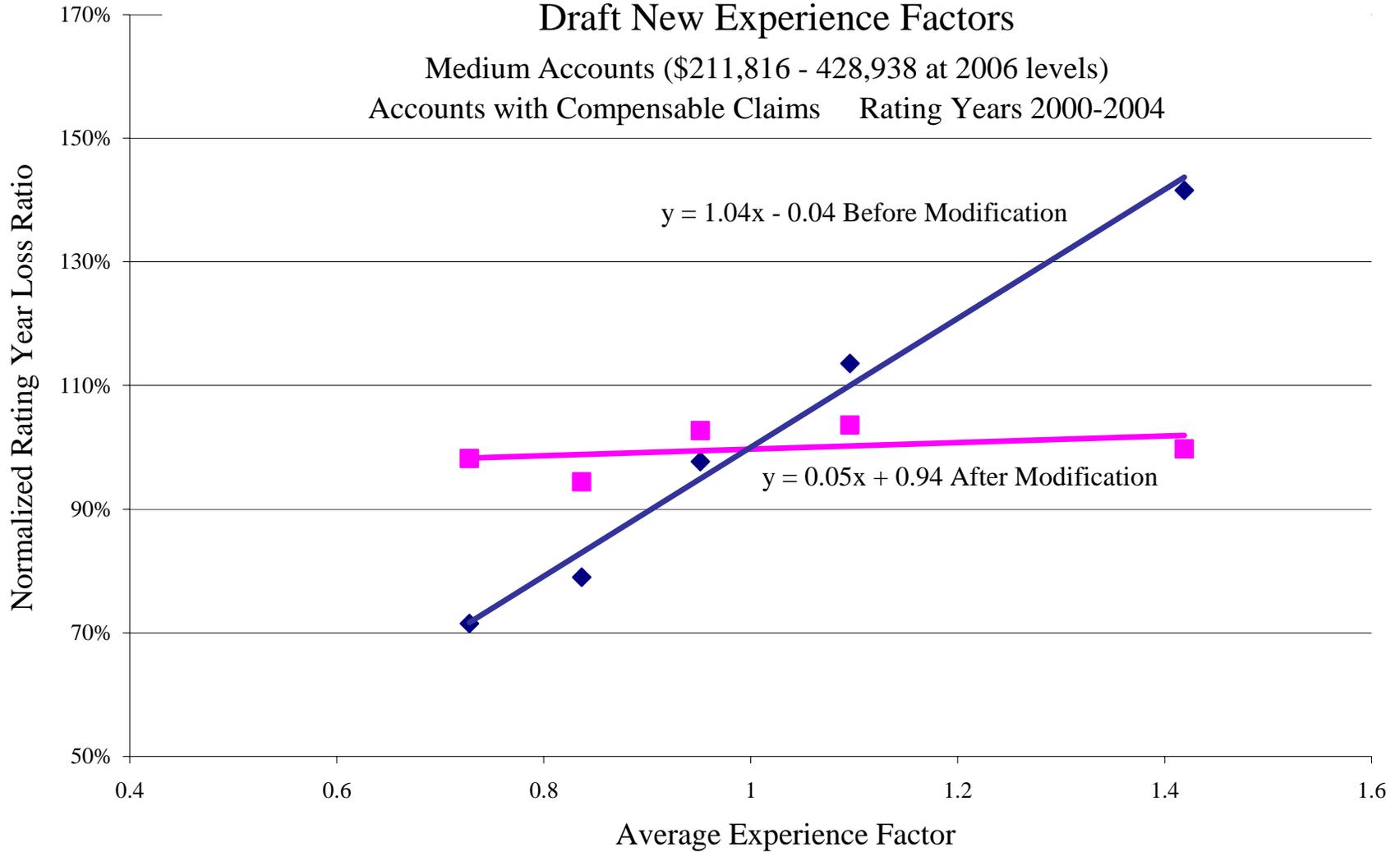
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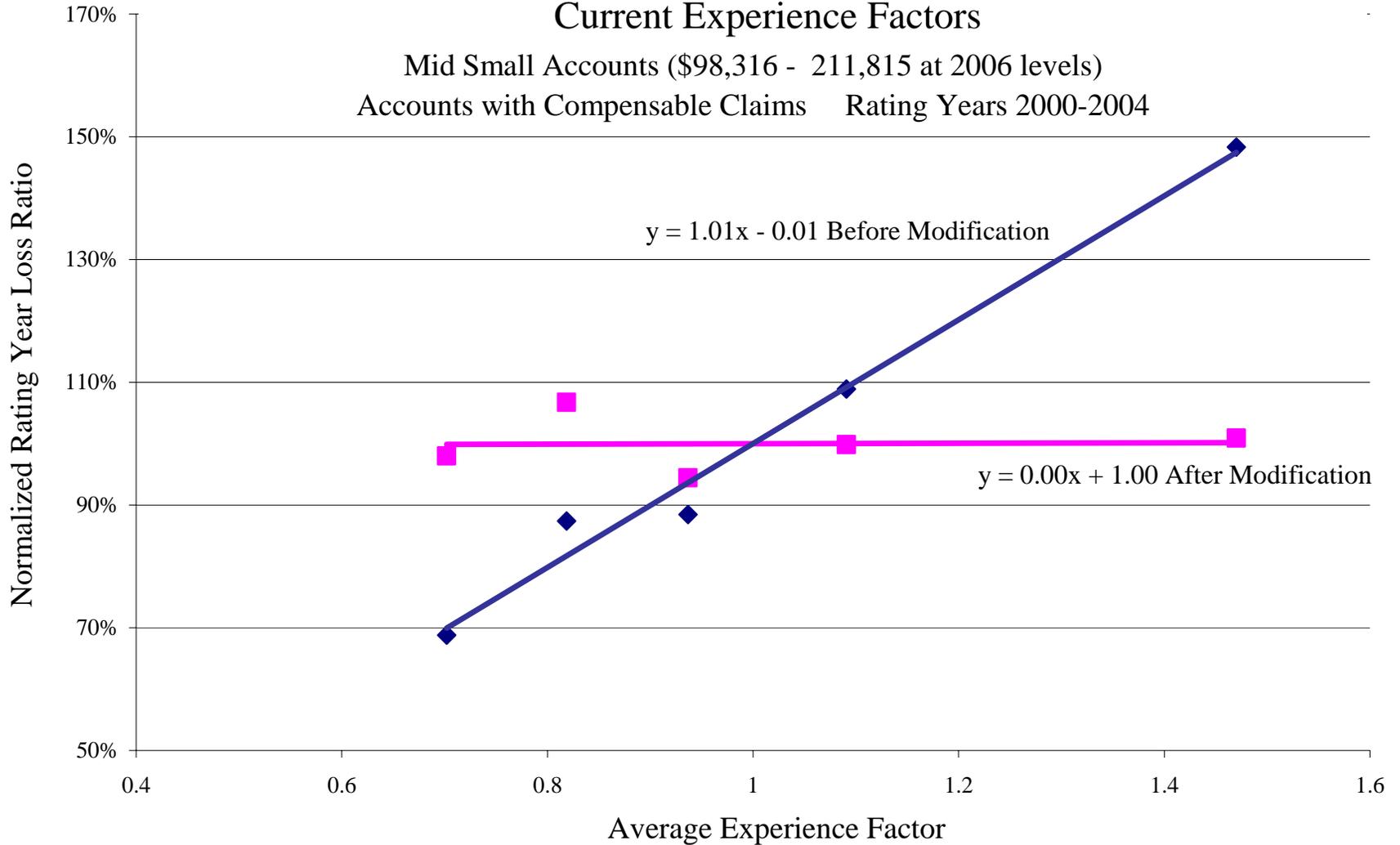
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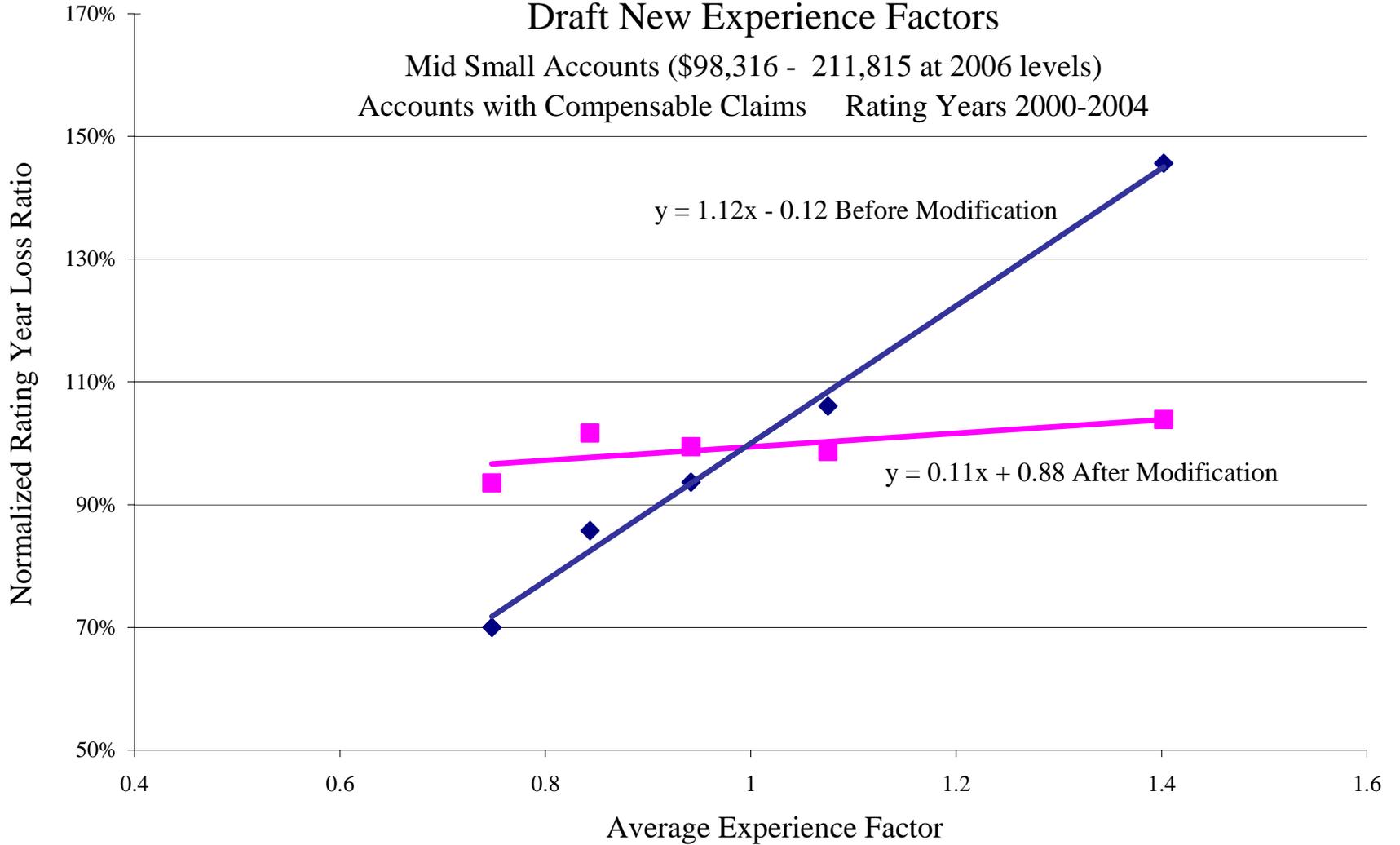
Loss Ratios Before and After Experience Rating Current Experience Factors

Mid Small Accounts (\$98,316 - 211,815 at 2006 levels)
Accounts with Compensable Claims Rating Years 2000-2004



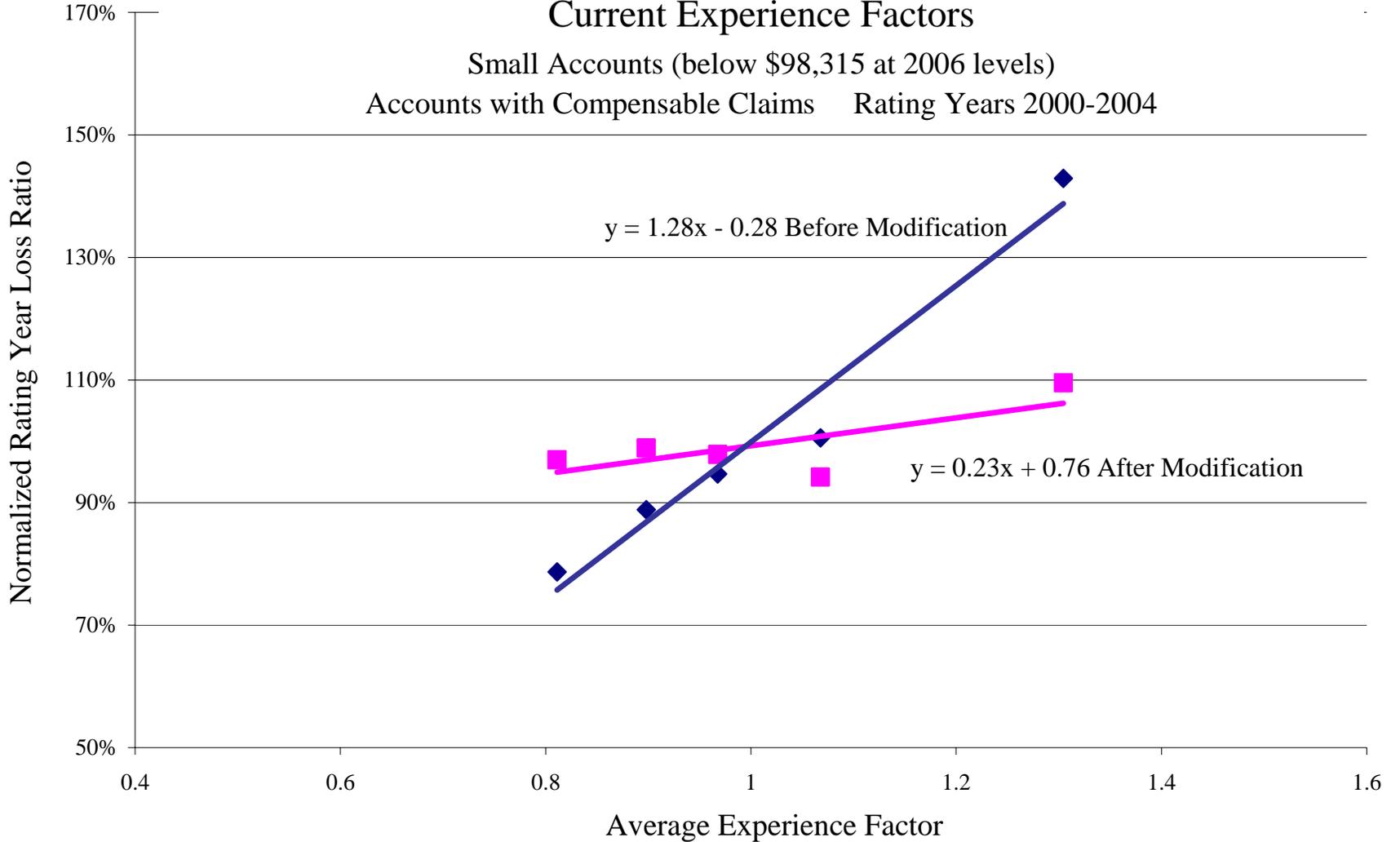
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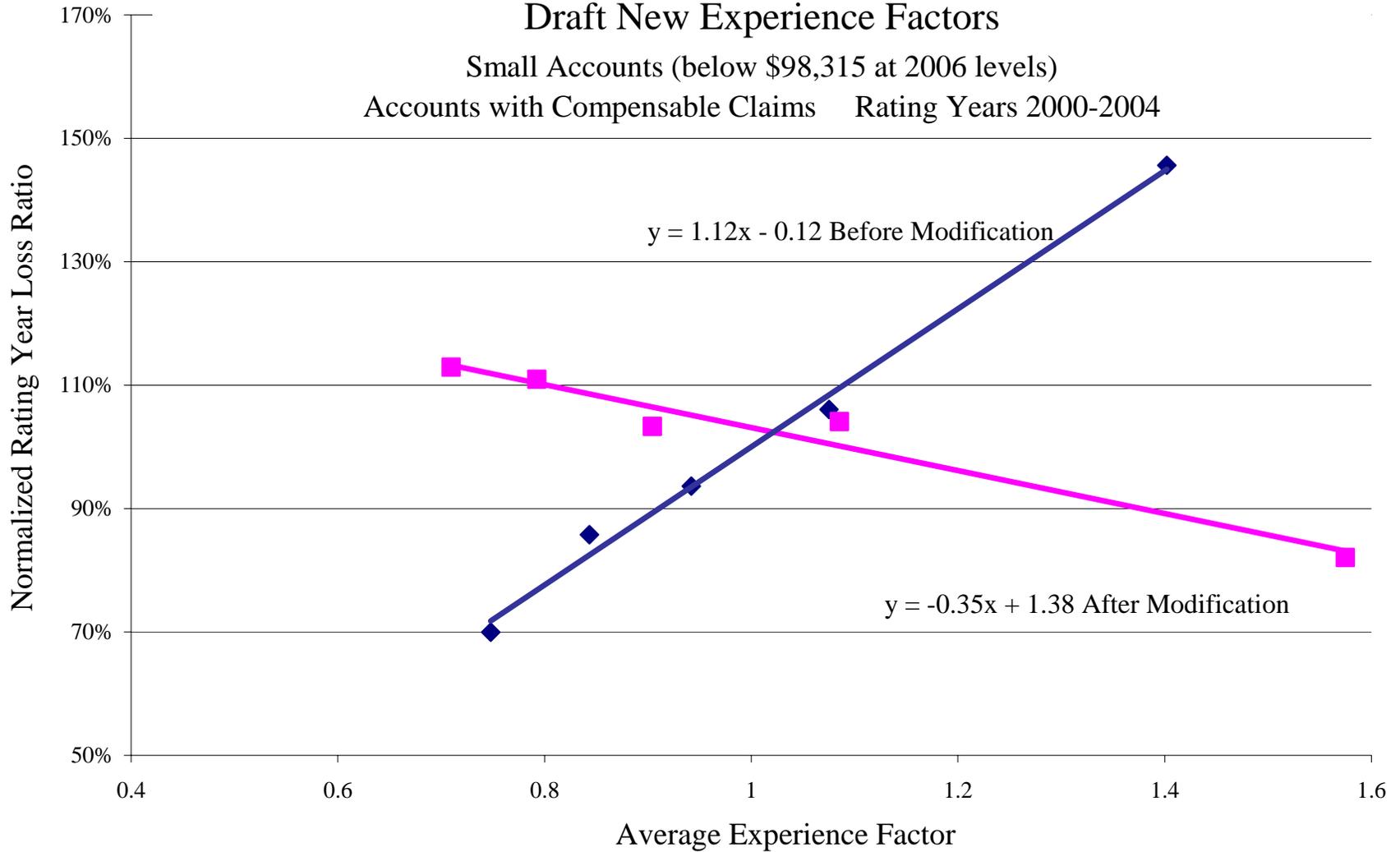
Loss Ratios Before and After Experience Rating Current Experience Factors

Small Accounts (below \$98,315 at 2006 levels)
Accounts with Compensable Claims Rating Years 2000-2004



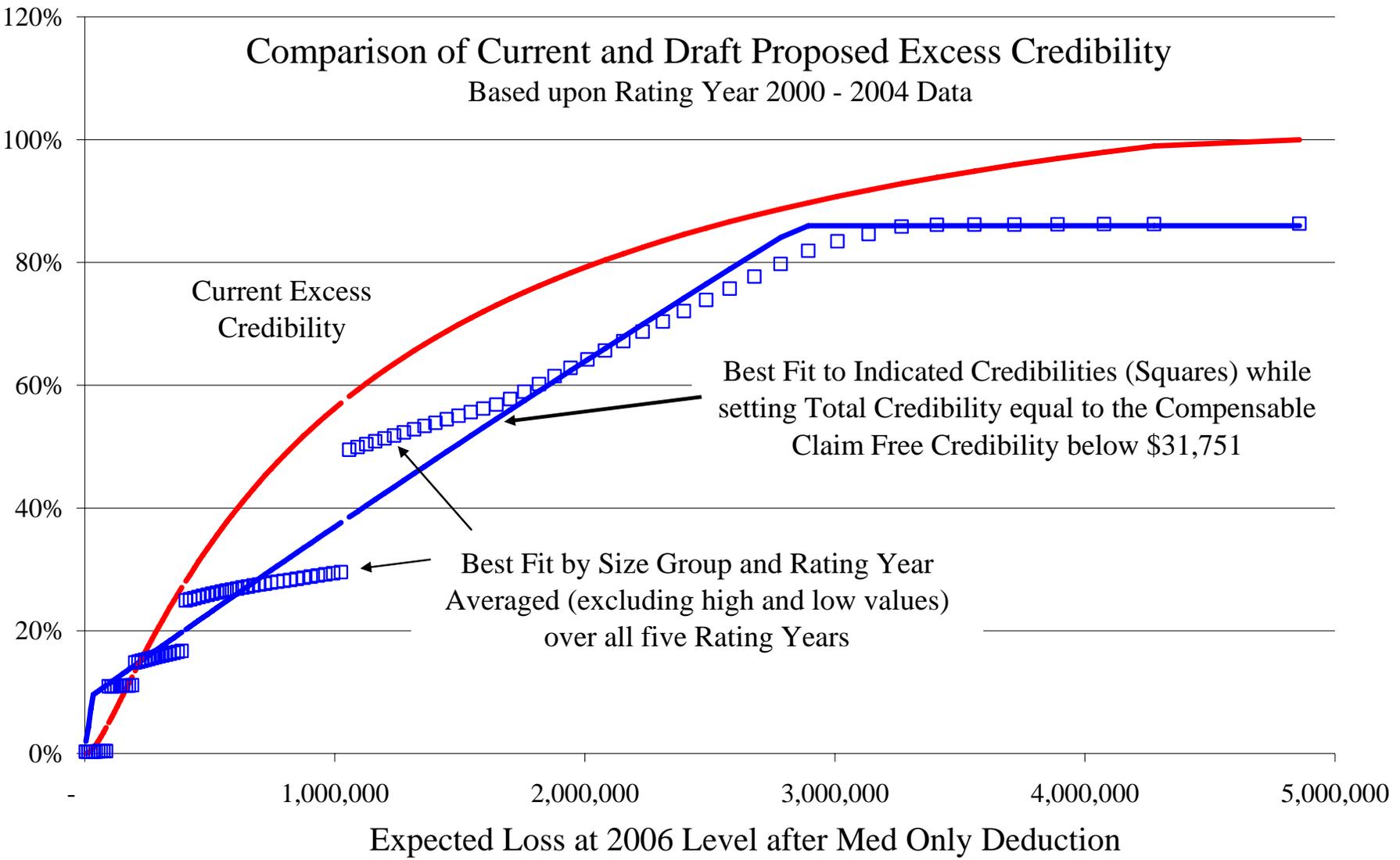
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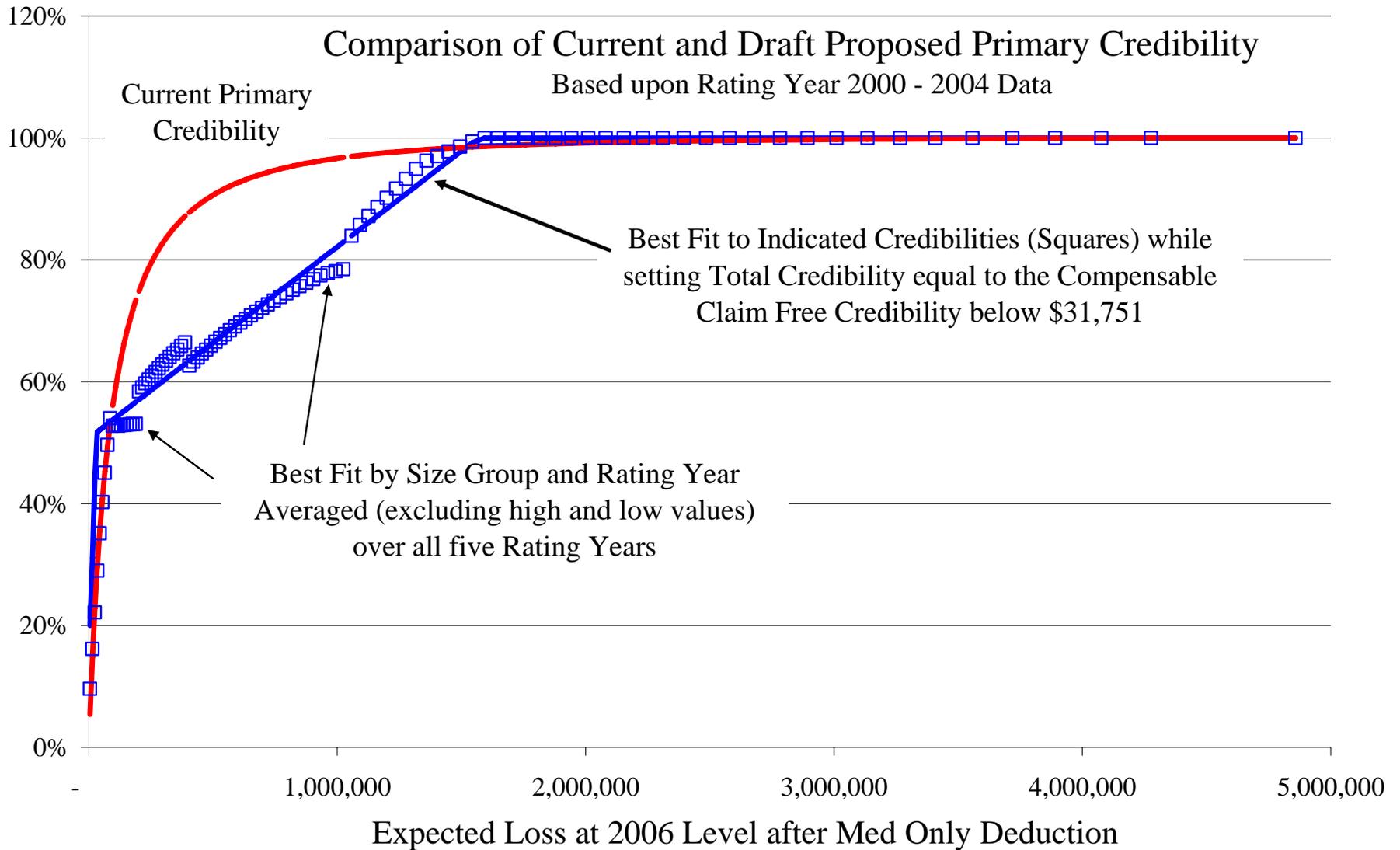
Comparison of Current and Draft Proposed Excess Credibility

Based upon Rating Year 2000 - 2004 Data



Comparison of Current and Draft Proposed Primary Credibility

Based upon Rating Year 2000 - 2004 Data



More Robust: Reduce Impact of 1st disability claim by Reducing Charges of non-Disability Claims

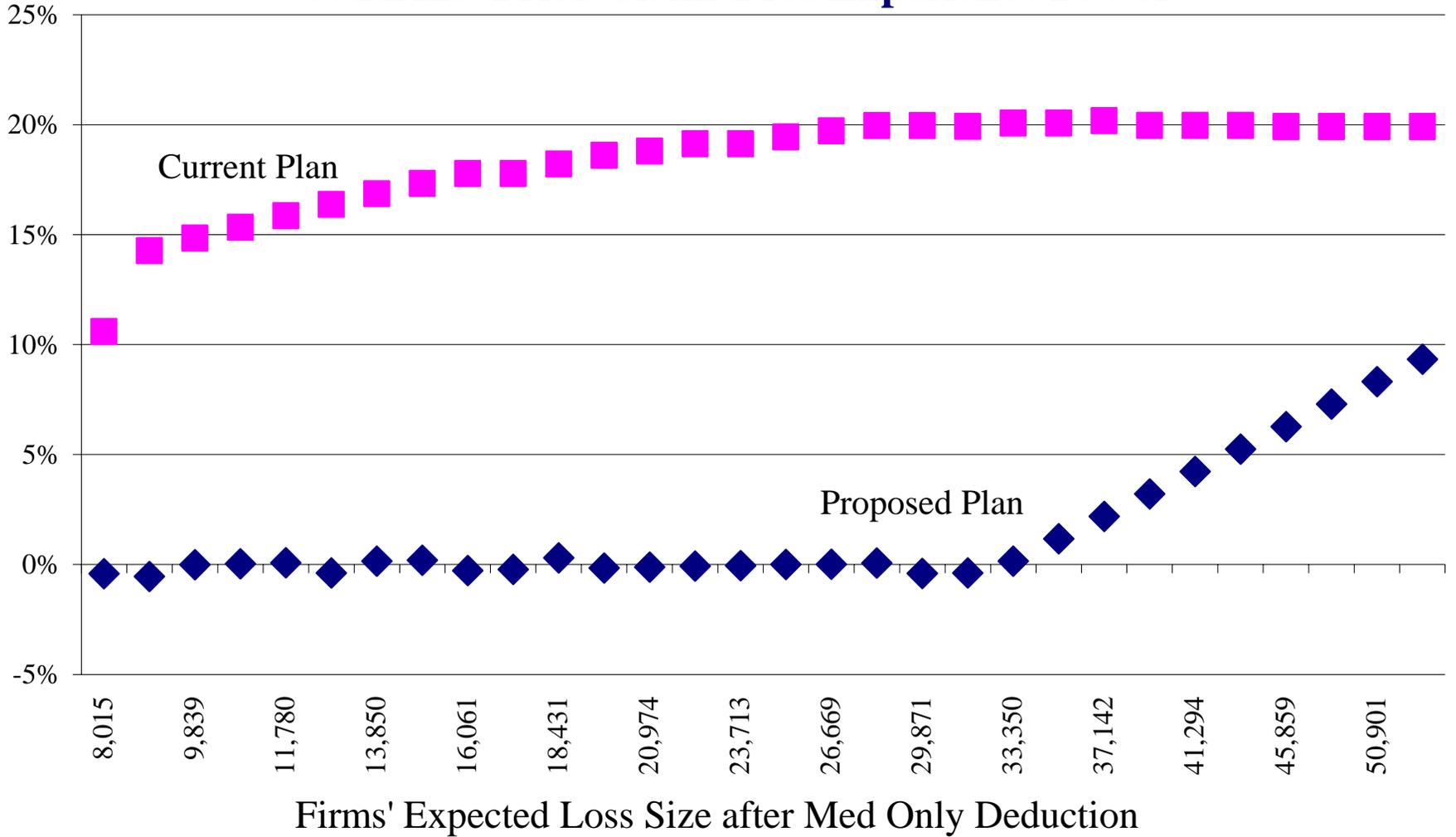
Proposed WAC 296-17-855 Change:

For any non-fatality claim which has no disability costs (either timeloss, permanent partial disability, permanent disability costs) either actually paid or estimated to be paid, the total cost for calculating the Primary Loss and Excess Loss shall first be reduced by the lesser of \$1,390 or the original total cost of the claim. Here are some examples for these mostly medical only claims:

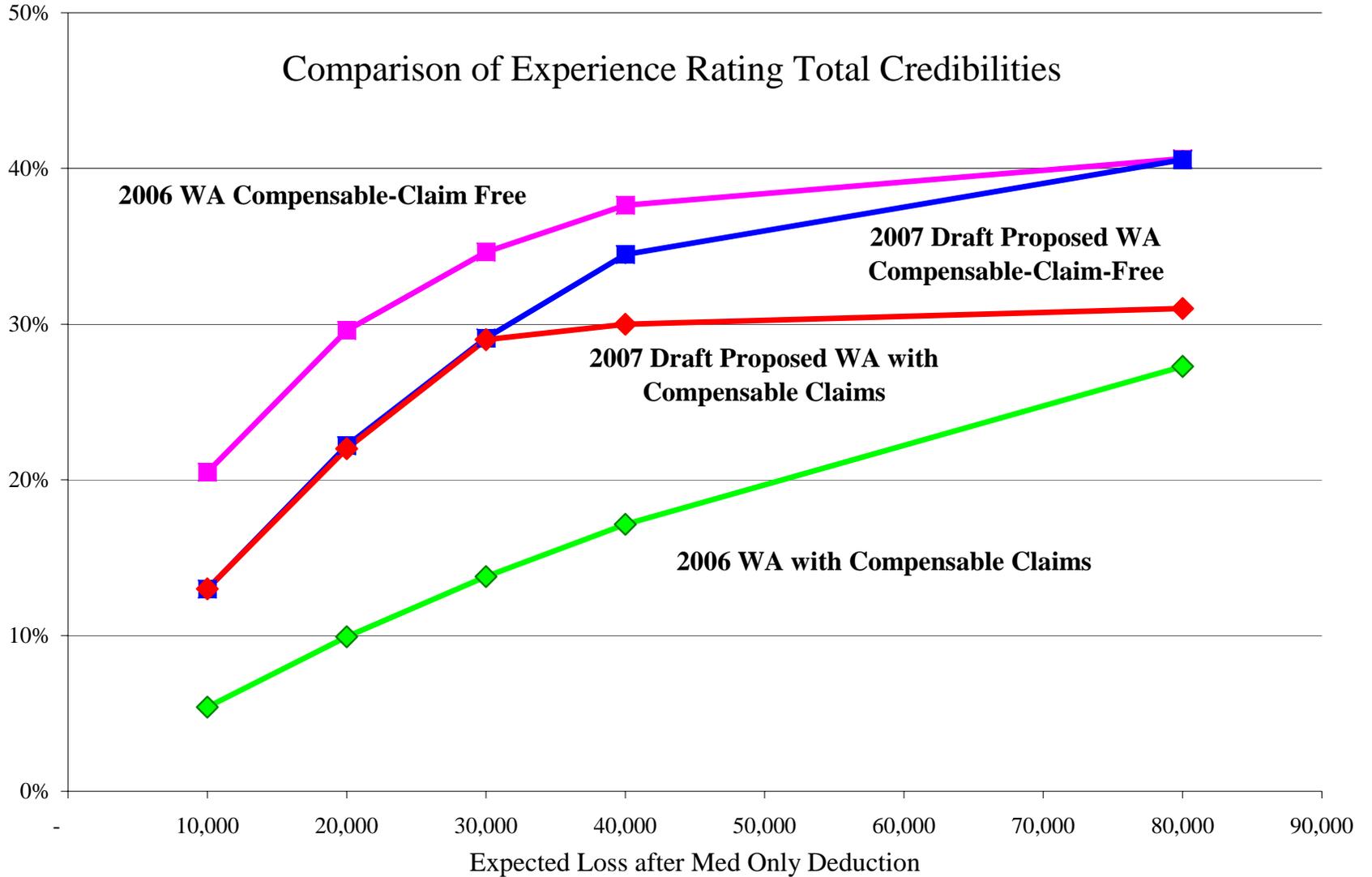
<u>Total Loss</u>	<u>Total Loss after Reduction</u>
\$ 200	\$ 0
\$ 2,000	\$ 610
\$20,000	\$18,610

Note: \$1,390 is twice the average case incurred cost of a medical only claim during the experience period for 2006 rating. This reduction will result in 70% of the medical only claim costs to be eliminated from the calculation. The NCCI also reduces by 70% medical only claim costs.

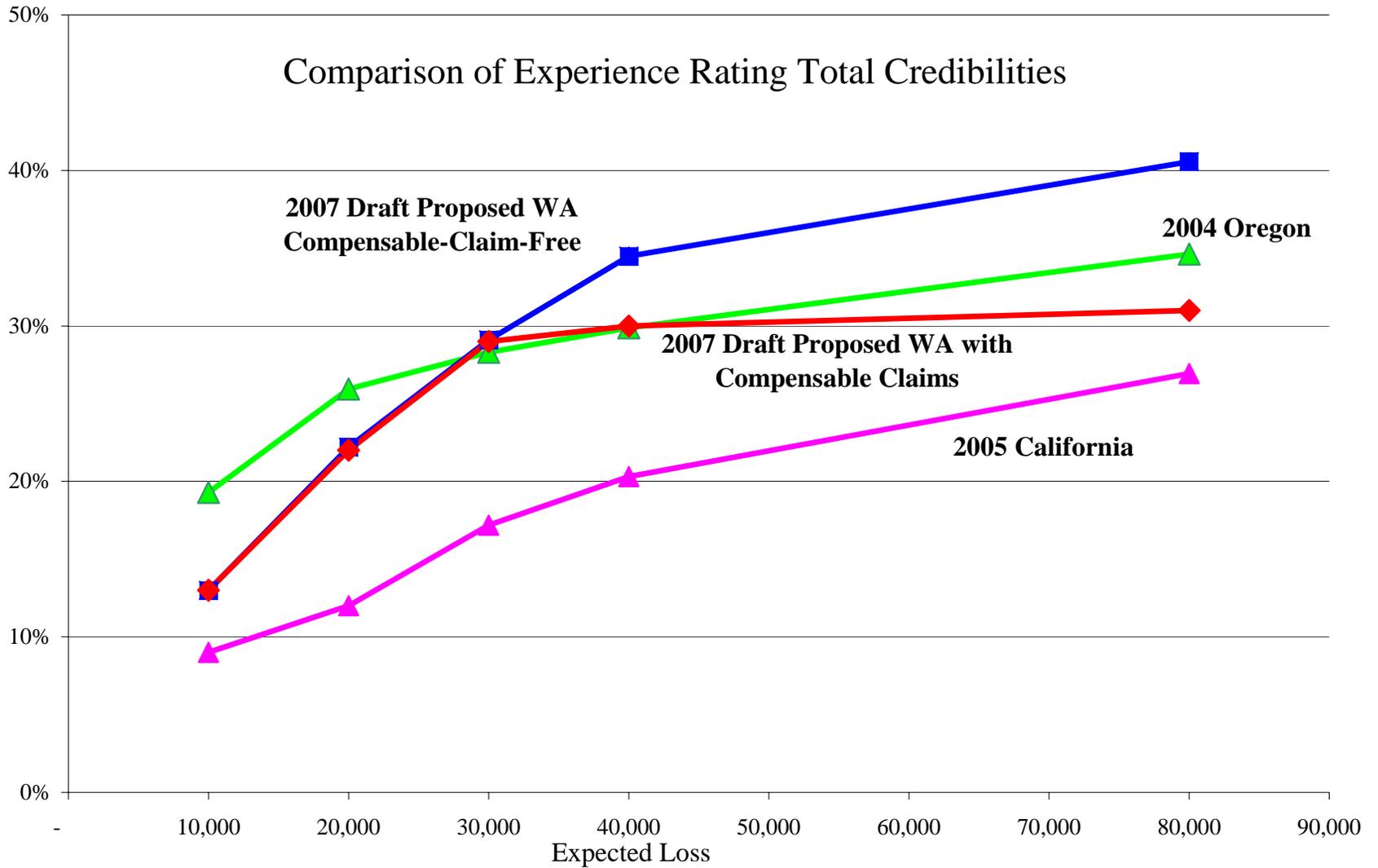
Minimum % Point Increase for First Dollar of Timeloss Loss to Firms' Prior Claim-Free Experience Factor



Comparison of Experience Rating Total Credibilities



Comparison of Experience Rating Total Credibilities



Comparison of Experience Rating Total Credibilities

